

# The Canadian Entomologist

**INDEX TO VOLUME 100**

**1968**

**Editor: D. P. Plelou**



**THE ENTOMOLOGICAL SOCIETY OF CANADA, OTTAWA**

## CONTENTS

QL461  
C21  
V.100  
Jan-June

**Allan, R. K.** See Doane, J. F., 358.

**Angle, B. J.** See Morgan, C. V. G., 499.

**Ashrafi, S. H.** See Naqvi, S. N. H., 649.

**Asquith, D.** See Horsburgh, R. L., 199.

**Atkins, M. D.** Scolytid pheromones - ready or not, 1115.

**Atkins, M. D., and Woods, T. A. D.** Survival of the balsam woolly aphid on *Abies* logs, 412.

**Ayre, G. L.** Comparative studies on the behaviour of three species of ants (Hymenoptera: Formicidae). I. Prey finding, capture, and transport, 165.

**Ayre, G. L., and Hitchon, D. E.** The predation of tent caterpillars, *Malacosoma americana* (Lepidoptera: Lasiocampidae) by ants (Hymenoptera: Formicidae), 823.

**Baker, W. V.** The gross structure and histology of the adult and larval gut of *Pentalobus barbatus* (Coleoptera: Passalidae), 1080.

**Bakke, A.** Field and laboratory studies on sex ratio in *Ips acuminatus* (Coleoptera: Scolytidae) in Norway, 640.

**Barker, P. S., and Johnston, J. A.** Reproductive capacity of two strains of *Cryptolestes turcicus* (Coleoptera: Cucujidae), 198.

**Berryman, A. A.** Distributions of *Scolytus ventralis* attacks, emergence, and parasites in grand fir, 57.

Development of sampling techniques and life tables for the fir engraver *Scolytus ventralis* (Coleoptera: Scolytidae), 1138.

**Blais, J. R., and Pilon, J. G.** Influence of temperature and moisture on the survival of cocoons, and on adult emergence of *Bucculatrix canadensisella*, 742.

**Borden, J. H., Brownlee, R. G., and Silverstein, R. M.** Sex pheromone of *Trypodendron lineatum* (Coleoptera: Scolytidae): Production, bio-assay, and partial isolation, 629.

**Borden, J. H., Silverstein, R. M., and Brownlee, R. G.** Sex pheromone of *Dendroctonus pseudotsugae* (Coleoptera: Scolytidae): Production, bioassay, and partial isolation, 597.

**Bottimer, L. J.** On the two species of *Bruchidius* (Coleoptera: Bruchidae) established in North America, 139.

On the location of types of five species of Bruchidae with notes on the early American literature of *Acanthoscelides obtectus*, 284.

Notes on Bruchidae of America north of Mexico with a list of World genera, 1009.

**Bradley, G. A., and Hinks, J. D.** Ants, aphids, and jack pine in Manitoba, 40.

**Bright, Jr., D. E.** Three new species of *Pityophthorus* from Canada (Coleoptera: Scolytidae), 604.

Review of the genus *Leiparthrum* in North America, with a description of one new species (Coleoptera: Scolytidae), 636.

Review of the tribe Xyleborini in America north of Mexico (Coleoptera: Scolytidae), 1288.

**Brown, N. R.** Notes on the Siphonaptera of New Brunswick, 486.  
See also Kertela, E. G., 894.

**Brownlee, R. G.** See Borden, J. H., 597, 629.

**Brust, R. A.** Temperature-induced intersexes in *Aedes* mosquitoes: Comparative study of species from Manitoba, 879.

**Buckner, C. H.** Reactions of small mammals to vital dyes, 476.

**Burns, D. P., and Gibson, L. P.** The leaf-mining weevil of yellow-poplar, 421.

**Burton, D. J.** See Kellogg, F. E., 763.

**Campbell, J. M.** A revision of the New World Micropeplinae (Coleoptera: Staphylinidae) with a rearrangement of the world species, 225.

A revision of the Mexican and Central American species of *Isomira* (Coleoptera: Alleculidae), 449.

**Carl, K. P.** *Thymelicus lineola* (Lepidoptera: Hesperiidae) and its parasites in Europe, 785.

**Carow, J. R., and Graham, K.** Nitrogen fertilization of the host tree and population growth of the balsam woolly aphid, *Adelges piceae* (Homoptera: Adelgidae), 478.

**Chapman, J. A.** See Nijholt, W. W., 1151.

**Cheng, H. H., and LeRoux, E. J.** Control of the birch leaf miner with disulfoton, 350.

**Condorashoff, S. F.** Biology of *Sterennius carinatus* (Coleoptera: Curculionidae), a reforestation pest in coastal British Columbia, 386.

**Coulson, R. N.** See Franklin, R. T., 807.

**Crowell, R. M.** Supplementary observations of the early developmental stages of *Albia caerulea* (Acarina: Axonopsidae), 178.

**Cumming, M. E. P.** The life history and morphology of *Adelges lariciatus* (Homoptera: Phylloxeridae), 113.

**Depner, K. R.** Hymenopterous parasites of the horn fly, *Haematobia irritans* (Diptera: Muscidae), in Alberta, 1057.

**Doane, J. F.** The influence of soil moisture on survival of eggs of the prairie grain wireworm, *Ctenicera destructor*, 362.

**Doane, J. F., and Allan, R. K.** A chamber for studying the effect of relative humidity and soil moisture on insect eggs, 358.

**Downes, J. A.** Notes on the organs and processes of sperm-transfer in the lower Diptera, 608. A nepticulid moth feeding at the leaf-nectaries of poplar, 1078.

**Dyer, E. D. A., and Taylor, D. W.** Attractiveness of logs containing female spruce beetles, *Dendroctonus obesus* (Coleoptera: Scolytidae), 769.

**Eidt, D. C., and Embree, D. G.** Distinguishing larvae and pupae of the winter moth, *Operophtera brumata*, and the Bruce spanworm, *C. bruceata* (Lepidoptera: Geometridae), 536.

**Eidt, D. C., and Little, C. H. A.** Insect control by artificially prolonging plant dormancy — A new approach, 1278.

**Eikenbary, R. D.** See Raney, H. G., 1091.

**Embree, D. G.** See Eidt, D. C., 536.

**Esenther, G. R., and Gray, D. E.** Subterranean termite studies in southern Ontario, 827.

**Fisher, R. W., and Morgan, N. G.** The effect on the two-spotted spider mite, *Tetranychus urticae*, of dicofol concentration and deposit distribution on the leaf surface, 777.

**Franklin, R. T., and Coulson, R. N.** Insects affecting seed production of shortleaf pine in the Georgia Piedmont, 807.

**Gagné, W. C., and Martin, J. L.** The insect ecology of red pine plantations in central Ontario. V. The Coccinellidae (Coleoptera), 835.

**George, J. A., and Howard, M. G.** Insemination without spermatophores in the oriental fruit moth, *Grapholita molesta* (Lepidoptera: Tortricidae), 190.

**Gibson, L. P.** See Burns, D. P., 421.

**Graham, K.** See Carrow, J. R., 478.

**Gray, D. E.** See Esenther, G. R., 827.

**Griffiths, K. J., and Lyons, L. A.** The establishment of *Lophyroplectus luteator* (Hymenoptera: Ichneumonidae) on *Neodiprion sertifer* (Hymenoptera: Diprionidae) in Ontario, 1095.

**Hardwick, D. F.** Three new California species of *Euxoa* (Lepidoptera: Noctuidae) belonging to the *westermanni* group, 268. Nomenclatorial notes on *Agrotis obesula* and *Agrotiphila* (Lepidoptera: Noctuidae), 891.

**Harris, P., and Zwölfer, H.** Screening of phytophagous insects for biological control of weeds, 295.

**Hayes, J. T.** See Wheeler, Jr., A. G., 221.

**Hayes, J. T., and Wheeler, Jr., A. G.** Evidence for a sex attractant in *Hemicrepidius decoloratus* (Coleoptera: Elateridae), 207.

**Hedlin, A. F., and Johnson, N. E.** A new species of *Camptonyia* (Diptera: Cecidomyiidae) from Douglas-fir cones, 532.

**Heinrichs, E. A., and Thompson, H. E.** Parasites, predators, and other arthropods associated with *Choristoneura houstonana* (Lepidoptera: Tortricidae) on *Juniperus* species in Kansas, 33. The biology of *Choristoneura houstonana* (Lepidoptera: Tortricidae), a pest of *Juniperus* species, 750.

**Herne, D. H. C.** Some responses of the European red mite, *Panonychus ulmi*, to immersion in water, 540.

**Heron, R. J.** Vital dyes as markers for behavioral and population studies of the larch sawfly, *Pristiphora erichsonii* (Hymenoptera: Tenthredinidae), 470.

**Hinks, J. D.** See Bradley, G. A., 40.

**Hitchon, D. E.** See Ayre, G. L., 823.

**Hobbs, G. A.** Ecology of species of *Bombus* (Hymenoptera: Apidae) in southern Alberta. VII. Subgenus *Bombus*, 156.  
Controlling insect enemies of the alfalfa leaf-cutter bee, *Megachile rotundata*, 781.

**Horsburgh, R. L., and Asquith, D.** The eggs and oviposition sites of *Hyaliodes vitripennis* on apple trees (Miridae: Hemiptera), 199.

**Howard, M. G.** See George, J. A., 190.

**Howden, H. F.** Generic relationships of *Thyce*, *Plectrodes*, *Dinacoma*, and *Hypotrichia*, with a description of a new genus and species from eastern Texas (Coleoptera: Scarabaeidae: Melolonthini), 542.  
Canadian *Ochobaeus*, with a description of a new species (Coleoptera: Scarabaeidae), 1118.

**Huston, F.** See Jaques, R. P., 813.

**Ingram, W.** See Lindquist, O. H., 1113.

**Ives, W. G. H.** Larch sawfly in relation to water levels and microtopography in tamarack bogs, 373.

**Jaques, R. P., Stultz, H. T., and Huston, F.** The mortality of the pale apple leafroller and winter moth by fungi and nematodes applied to soil, 813.

**Johnson, N. E.** See Hedlin, A. F., 532.

**Johnston, J. A.** See Barker, P. S., 198.

**Kasting, R., and McGinnis, A. J.** Growth cabinet for the efficient handling of containers used for rearing insects, 193.

**Kellogg, F. E., Burton, D. J., and Wright, R. H.** Measuring mosquito repellency, 763.

**Kelton, L. A.** Revision of the North American species of *Slaterocoris* (Heteroptera: Miridae), 1121.

**Kettela, E. G., and Brown, N. R.** A note on the occurrence of *Adelges strobilobius* (Homoptera: Adelgidae) in cones of eastern larch, 894.

**Kevan, D. K. McE.** A study of the genus *Chrotogonus* Audinet-Serville, 1838 (Orthoptera; Acridoidea; Pyrgomorphidae). X. Recently described species from China and central Asia, 152.

**Khan, N. R., and Musgrave, A. J.** Some anatomical differences of possible taxonomic value in the female reproductive organs of *Sitophilus* (Curculionidae: Coleoptera), 1226.

**Lafrance, J.** The seasonal movements of wireworms (Coleoptera: Elateridae) in relation to soil moisture and temperature in the organic soils of southwestern Quebec, 801.

**Larson, D. J.** Two new species of *Dyschirius* from the United States (Coleoptera: Carabidae: Scaritini), 1108.

**LeRoux, E. J.** See Cheng, H. H., 350.

**Lilly, C. E., and McGinnis, A. J.** Quantitative responses of males of *Limonius californicus* (Coleoptera: Elateridae) to female sex pheromone, 1071.

**Lindquist, E. E.** An unusual new species of *Tarsonomus* (Acarina: Tarsonomidae) associated with the Indian honey bee, 1002.

**Lindquist, O. H., and Ingram, W.** The pill beetle, *Cylindrus alternatus* (Coleoptera: Byrrhidae), a nursery pest in Ontario, 1113.

**Little, C. H. A.** See Eidt, D. C., 1278.

**Lord, F. T.** An appraisal of methods of sampling apple trees and results of some tests using a sampling unit common to insect predators and their prey, 23.  
Influence of the proportion of fruiting to non-fruiting clusters on the distribution of insect predators on apple trees, 308.

**Loschiavo, S. R.** Effect of oviposition sites on egg production and longevity of *Trogoderma parabile* (Coleoptera: Dermestidae), 86.

**Lyons, L. A.** See Griffiths, K. J., 1095.

**MacKay, M. R.** About lepidopterous immatures, 337.  
The doubtful occurrence of *Parantrene* in Japan (Lepidoptera: Aegeriidae), 1324.  
The larva of *Cissuvora ampelopsis* Eng. and the generic position of *phoradendri* Eng. (Lepidoptera: Aegeriidae), 1328.

**Madsen, H. F., and Williams, K.** The effects of petroleum oils on Bartlett pears and on pear psylla, *Psylla pyricola*, 290.

**Mansingh, A., and Smallman, B. N.** Precocious termination of "obligatory" diapause in field-collected pupae of *Anthraea polyphemus*, 134.

**Martin, J. L.** See Gagné, W. C., 835.

**Mason, W. R. M.** New Canadian Cryptinae (Ichneumonidae: Hymenoptera), 17.  
New Canadian Braconidae (Hymenoptera), 715.

**McAlpine, J. F.** An annotated key to drosophilid genera with bare or micropubescent aristae and a revision of *Paracacoxenus* (Diptera: Drosophilidae), 514.  
Taxonomic notes on *Eurychroromyia mallea* (Diptera: Eurychroromyiidae), 819.

**McAlpine, J. F., and Munroe, D. D.** Swarming of lonchaeid flies and other insects, with descriptions of four new species of Lonchaeidae (Diptera), 1154.

**McClanahan, R. J.** Influence of temperature on the reproductive potential of two mite predators of the two-spotted spider mite, 549.

**McGhehey, J. H.** Territorial behaviour of bark-beetle males, 1153.

**McGinnis, A. J.** See Kasting, R., 193; Lilly, C. E., 1071.

**McGregor, M. D., and Sandin, L. O.** Observations on the pinyon pine sawfly, *Neodiprion edulicolus*, in eastern Nevada (Hymenoptera: Diprionidae), 51.

**Menke, A. S.** A review of the New World species of *Pison*. I. The subgenus *Krombeiniellum* (Hymenoptera: Sphecidae), 1100.

**Messenger, P. S.** Bioclimatic studies of the aphid parasite *Praon exsoletum*. I. Effects of temperature on the functional response of females to varying host densities, 728.

**Morgan, C. V. G., and Angle, B. J.** Notes on the habits of the San José scale and the European fruit scale (Homoptera: Diaspididae) on harvested apples in British Columbia, 499.

**Morgan, N. G.** See Fisher, R. W., 777.

**Morris, R. F.** A case of urinogenital myiasis caused by larvae of *Anisopus fenestralis* (Diptera: Anisopidae), 557.

**Munroe, D. D.** See McAlpine, J. F., 1154.

**Munroe, E.** New Pyralidae (Lepidoptera) from the Papuan Region. II, 394.  
New species of *Apilocrocis* with a key to known species (Lepidoptera: Pyralidae), 441.

**Munroe, E., and Mutuura, A.** Contributions to a study of the Pyraustinae (Lepidoptera: Pyralidae) of temperate East Asia: I, 847; II, 861; III, 947; IV, 986.

**Musgrave, A. N.** See Khan, N. R., 1226.

**Mutuura, A.** See Munroe, E., 847, 861, 974, 986.

**Naqvi, S. N. H., Ashrafi, S. H., and Qadri, M. A. H.** Phosphomonoesterase activity in the life cycle stages of *Schistocerca gregaria*, 649.

**Neff, S. E.** Observations on the immature stages of *Gimmomera cerea* and *G. incisurata* (Diptera: Anthomyiidae, Scatophaginacae), 74.

**Nijholt, W. W., and Chapman, J. A.** A flight trap for collecting living insects, 1151.

**Panki, P.** The influence of environmental conditions on brood rearing, build-up, and honey production of package bee colonies, 127.

**Perey, J. E.** See Weatherston, J., 1065.

**Philogène, B. J. R.** See Smirnoff, W. A., 69.

**Pielou, D. P., and Verma, A. N.** The arthropod fauna associated with the birch bracket fungus, *Polyporus betulinus*, in Eastern Canada, 1179.

**Pilon, J. G.** See Blais, J. R., 742.

**Pimentel, D., and Stone, F. A.** Evolution and population ecology of parasite-host systems, 655.

**Prokopy, R. J.** Influence of photoperiod, temperature, and food on initiation of diapause in the apple maggot, 318.

**Putman, W. L.** Some effects of anoxia and hypoxia on the European red mite, *Panonychus ulmi* (Acarina: Tetranychidae), 617.

**Putnam, L. G.** Experiments in the quantitative relations between *Diadegma insularis* (Hymenoptera: Ichneumonidae) and *Microplitis plutellae* (Hymenoptera: Braconidae) with their host *Plutella maculipennis* (Lepidoptera: Plutellidae), 11.

**Qadri, M. A. H.** See Naqvi, S. N. H., 649.

**Raney, H. G., and Eikenbary, R. D.** Investigations on flight habits of the pecan weevil, *Curculio carya* (Coleoptera: Curculionidae), 1091.

**Read, D. C.** Some comments on a recent paper by D. G. R. McLeod and G. R. Driscoll concerning diapause in the cabbage maggot, 304.

**Reinhard, H. J.** A review of the genus *Macromya* (Tachinidae: Diptera), 1280.

**Richards, W. R.** A new *Salix*-infesting *Chaitophorus* from Saskatchewan (Homoptera: Aphididae), 181.

A new species of *Pleotrichophorus* from British Columbia (Homoptera: Aphididae), 195.

*Glyphina longiseta*, a new alder-infesting aphid from Nova Scotia (Homoptera: Aphididae), 330.

New combination and redescription of *Monellia californica* with a key to the species of *Monelliopsis* (Homoptera: Aphididae), 437.

A revision of the world fauna of *Tuberculatus*, with descriptions of two new species from China (Homoptera: Aphididae), 561.

A revision of the Nearctic genus *Neosymydobius* (Homoptera: Aphididae), 958.

*Neuquenaphis papillata*, a new *Nothofagus*-infesting aphid from Chile, with a review of related species from South America (Homoptera: Aphididae), 1199.

A new species of *Iziphya* from Ontario and Quebec, with a review of the Nearctic species (Homoptera: Aphididae), 1207.

*Calaphis manitobensis*, a new aphid collected on *Betula pumila* in Manitoba (Homoptera: Aphididae), 1229.

**Robinson, A. G.** Two new species of aphids (Homoptera: Aphididae) from Canada, 275.

**Salkeld, E. H., and Wilkes, A.** The ultrastructure of insect surfaces by scanning electron microscopy, 1.

**Sandin, L. O.** See McGregor, M. D., 51.

**Sauer, R. J.** Two new species of crab spiders (Araneae: Thomisidae) from North Dakota, 1148.

**Schmid, F.** Le genre *Gunungiella* Ulmer (Trichoptères: Philopotamidae), 897.  
La sous-famille des Apataniines en Inde (Trichoptera, Limnophilidae), 1233.

**Scott, K. R.** An environmental cabinet with variable air velocity for insect studies, 89.

**Seabrook, W. D.** The innervation of the terminal abdominal segments (VIII-XI) of the desert locust, *Schistocerca gregaria*, 693.

**Silver, G. T.** Studies on the Sitka spruce weevil, *Pissodes sitchensis*, in British Columbia, 93.

**Silverstein, R. M.** See Borden, J. H., 597, 629.

**Smallman, B. N.** See Mansingh, A., 134.

**Smirnoff, W. A.** The nature of cysts found in pupae and adults of *Neodiprion swainei*, 313.

**Smirnoff, W. A., and Philogène, B. J. R.** The accumulation of uric acid in the fat body of sawflies and its detection, 69.

**Specht, H. B.** Phytoseiidae (Acarina: Mesostigmata) in the New Jersey apple orchard environment with descriptions of spermathecae and three new species, 673.

**Sprague, J. B.** Apparent DDT tolerance in an aquatic insect disproved by test, 279.

**Stark, R. W.** See Wood, D. L., 145.

**Stephens, J. L.** See Wheeler, Jr., A. G., 221.

**Stone, F. A.** See Pimentel, D., 655.

**Stultz, H. T.** Aphids on strawberry in Nova Scotia, 869.  
See also Jacques, R. P., 813.

**Swailes, G. E.** Feeding through root surfaces of rutabaga by *Hylemya brassicae* (Diptera: Anthomyiidae), 1061.

**Syme, P. D.** *Agathis binominata* (Hymenoptera: Braconidae) parasitizing *Rhyacionia buoliana* (Lepidoptera: Olethreutidae) in central Ontario, 893.

**Tauber, C. A.** See Tauber, M. J., 341.

**Tauber, C. A., and Tauber, M. J.** *Lomamyia latipennis* (Neuroptera: Berothidae) life history and larval descriptions, 623.

**Tauber, M. J.** See Tauber, C. A., 623.

**Tauber, M. J., and Tauber, C. A.** Biology and leaf-mining behaviour of *Phytomyza lanati* (Diptera: Agromyzidae), 341.

**Taylor, D. W.** See Dyer, E. D. A., 769.

**Thomas, H. A.** A description of the pupa of the pales weevil, *Hylobius pales*, and a method for identifying its sex, 434.

**Thompson, H. E.** See Heinrichs, E. A., 33, 750.

**Thompson, R. P.** A survey of ectoparasite infestations on poultry flocks in Nova Scotia and Prince Edward Island, 402.

**Titus, F. A.** See Underwood, G. R., 407.

**Traynier, R. M. M.** Sex attraction in the Mediterranean flour moth, *Anagasta kühniella*: Location of the female by the male, 5.

**Underwood, G. R., and Titus, F. A.** Description and seasonal history of a leaf miner on poplar *Messa populifoliella* (Hymenoptera: Tenthredinidae), 407.

**Verma, A. N.** See Pielou, D. P., 1179.

**Waterhouse, J. S.** Studies on the garden symphylan, *Scutigerella immaculata* (Symphyla: Scutigerellidae), 172.

**Weatherston, J., and Percy, J. E.** Studies of physiologically active arthropod secretions. I. Evidence for a sex pheromone in female *Vitula edmundsae* (Lepidoptera: Phycitidae), 1065.

**Wheeler, Jr., A. G., Hayes, J. T., and Stephens, J. L.** Insect predators of mummified pea aphids, 221.

**Wheeler, Jr., A. G.** See Hayes, J. T., 207.

**Wickman, B. E.** The biology of the fir tree borer, *Semanotus litigiosus* (Coleoptera: Cerambycidae), in California, 208.

**Wilkes, A.** See Selkeld, E. H., 1.

**Williams, K.** See Madsen, H. F., 290.

**Wilson, L. F.** Life history and habits of *Rhabdophaga* sp. (Diptera: Cecidomyiidae), a gall midge attacking willow in Michigan, 184.  
Life history and habits of the willow beaked gall midge, *Mayetiola rigidae* (Diptera: Cecidomyiidae), in Michigan, 202.  
Life history and habits of the pine cone willow gall midge, *Rhabdophaga strobiloides* (Diptera: Cecidomyiidae), in Michigan, 430.  
Life history, habits, and damage of a gall midge, *Oligotrophus papyriferae* (Diptera: Cecidomyiidae), injurious to paper birch in Michigan, 663.

**Wong, H. R.** *Decanematus*, a sawfly genus new to North America (Hymenoptera: Tenthredinidae), 84.  
A revision of the Tribe Pristolini (Hymenoptera: Tenthredinidae), 1049.

**Wood, P. W.** The effect of ambient humidity on the repellency of ethylhexanediol ('6-12') to *Aedes aegypti*, 1331.

**Wood, D. L., and Stark, R. W.** The life history of *Ips calligraphus* (Coleoptera: Scolytidae) with notes on its biology in California, 145.

**Wood, P. W., and Wright, R. H.** Some responses of flying *Aedes aegypti* to visual stimuli, 504.

**Woods, T. A. D.** See Atkins, M. D., 412.

**Wright, R. H.** See Wood, P. W., 504; Kellogg, F. E., 763.

**Zwölfer, H.** See Harris, P., 295

## INDEX OF NEW TAXA

	PAGE	PAGE
<b>New Genera and Subgenera</b>		
<i>Aristebulea</i> Munroe and Mutuura (Lepidoptera)	855	<i>canens</i> Richards, <i>Chaitophorus</i> . . . . .
<i>Gynenomis</i> Munroe and Mutuura (Lepidoptera)	990	<i>caradai</i> Munroe and Mutuura, . . . . .
<i>Hypotbyce</i> Howden (Coleoptera)	542	<i>Thliptoceras</i> . . . . .
<i>Melastola</i> Wong (Hymenoptera)	1053	<i>cerberus</i> Larson, <i>Dyschirius</i> . . . . .
<i>Mimetebulea</i> Munroe and Mutuura (Lepidoptera)	858	<i>championi</i> Campbell, <i>Isomira</i> . . . . .
<i>Oronomis</i> Munroe and Mutuura (Lepidoptera)	999	<i>chandrabucita</i> Schmid, <i>Moropsyche</i> . . . . .
<i>Paranomis</i> Munroe and Mutuura (Lepidoptera)	991	<i>charadja</i> Schmid, <i>Apataniana</i> . . . . .
<i>Pronomis</i> Munroe and Mutuura (Lepidoptera)	986	<i>chodachi</i> Schmid, <i>Gunungiella</i> . . . . .
<i>Toxobots</i> Munroe and Mutuura (Lepidoptera)	867	<i>chovimchi</i> Schmid, <i>Gunungiella</i> . . . . .
<i>Xanthopsanma</i> Munroe and Mutuura (Lepidoptera)	978	<i>chotrimchi</i> Schmid, <i>Gunungiella</i> . . . . .
		<i>cilialis christophi</i> Munroe and Mutuura, <i>Nascia</i> . . . . .
		<i>cilialis kumatai</i> Munroe and Mutuura, <i>Nascia</i> . . . . .
		<i>cinsicula</i> Reinhard, <i>Macromya</i> . . . . .
		<i>clarki</i> Wong, <i>Pristola</i> . . . . .
		<i>collinus</i> Bright, <i>Pityophthorus</i> . . . . .
		<i>colossus</i> Larson, <i>Dyschirius</i> . . . . .
		<i>crocata</i> Reinhard, <i>Macromya</i> . . . . .
		<i>cryptica</i> Hardwick, <i>Euxoa</i> . . . . .
		<i>dachani</i> Schmid, <i>Gunungiella</i> . . . . .
		<i>demicosta</i> Munroe and Mutuura, <i>Paranomis</i> . . . . .
		<i>devisaraspali</i> Schmid, <i>Apatania</i> . . . . .
		<i>dirghababu</i> Schmid, <i>Apatania</i> . . . . .
		<i>dirghakarni</i> Schmid, <i>Moropsyche</i> . . . . .
		<i>dondalei</i> Sauer, <i>Ebo</i> . . . . .
		<i>triggeri</i> Specht, <i>Amblysetus</i> . . . . .
		<i>duckei</i> Menke, <i>Pison (Krombeiniellum)</i> . . . . .
		<i>dulichus</i> Wong, <i>Decanematus</i> . . . . .
		<i>durangoensis</i> Campbell, <i>Micropeplus</i> . . . . .
		<i>dvadachi</i> Schmid, <i>Gunungiella</i> . . . . .
		<i>dvatrimchi</i> Schmid, <i>Gunungiella</i> . . . . .
		<i>dvitiya</i> Schmid, <i>Gunungiella</i> . . . . .
		<i>dybasi</i> Campbell, <i>Peplomircrus</i> . . . . .
		<i>dytiscivorus</i> Mason, <i>Medophron</i> . . . . .
		<i>ekadachi</i> Schmid, <i>Gunungiella</i> . . . . .
		<i>ekatrimchi</i> Schmid, <i>Gunungiella</i> . . . . .
		<i>ekavimchi</i> Schmid, <i>Gunungiella</i> . . . . .
		<i>fentoni koreensis</i> Munroe and Mutuura, <i>Pseudebulea</i> . . . . .
		<i>fentoni sadoensis</i> Munroe and Mutuura, <i>Pseudebulea</i> . . . . .
		<i>fentoni ussuriensis</i> Munroe and Mutuura, <i>Pseudebulea</i> . . . . .
		<i>fentoni yezoensis</i> Munroe and Mutuura, <i>Pseudebulea</i> . . . . .
		<i>ferruginosa</i> Wong, <i>Melastola</i> . . . . .
		<i>flavicolor</i> Munroe and Mutuura, <i>Pronomis</i> . . . . .
		<i>flavipes</i> Kelton, <i>Slaterocoris</i> . . . . .
		<i>fomitidis</i> Mason, <i>Diospilus</i> . . . . .
		<i>formosanum</i> Munroe and Mutuura, <i>Thliptoceras</i> . . . . .
		<i>gairichringiya</i> Schmid, <i>Moropsyche</i> . . . . .
		<i>girautcharichmu</i> Schmid, <i>Moropsyche</i> . . . . .

PAGE	PAGE		
girikbit Schmid, <i>Moropsyche</i> . . . . .	1262	novateutonialis Munroe, <i>Apilocrociis</i> . . . . .	441
grandis Kelton, <i>Slaterocoris</i> . . . . .	1131	nubilosa Munroe, <i>Talanga</i> . . . . .	396
hainanensis Munroe and Mutuura, <i>Pseudebulea</i> . . . . .	851	orarius Bright, <i>Pityophthorus</i> . . . . .	607
hamiltoni Robinson, <i>Macrosiphum</i> . . . . .	275	orientalis Munroe and Mutuura, <i>Psammotis</i> . . . . .	976
hollandiae Munroe, <i>Aphytaceros</i> . . . . .	396	orientalis Richards, <i>Tuberculatus</i> ( <i>Tuberculatus</i> ) . . . . .	576
howdeni <i>bidalgoensis</i> Campbell, <i>Isomira</i> . . . . .	455	orsitesa McAlpine and Munroe, <i>Lonchaea</i> . . . . .	1172
howdeni <i>howdeni</i> Campbell, <i>Isomira</i> . . . . .	454	pachtchima Schmid, <i>Gunungiella</i> . . . . .	952
indoapis Lindquist, <i>Tarsonemus</i> . . . . .	1002	pachtchadaci Schmid, <i>Gunungiella</i> . . . . .	930
iridomelaena Munroe, <i>Talanga</i> . . . . .	399	pachtchami Schmid, <i>Gunungiella</i> . . . . .	920
itarichta Schmid, <i>Notania</i> . . . . .	1268	pachtchirimchi Schmid, <i>Gunungiella</i> . . . . .	948
juliae Hardwick, <i>Euxoa</i> . . . . .	272	papillata Richards, <i>Neuquenaphis</i> . . . . .	1203
kricha Schmid, <i>Notania</i> . . . . .	1266	pepperi Specht, <i>Amblyseius</i> . . . . .	682
krichnaruna Schmid, <i>Moropsyche</i> . . . . .	1258	picketti Specht, <i>Amblyseius</i> . . . . .	681
krombeini Menke, <i>Pison</i> ( <i>Krombeiniellum</i> ) . . . . .	1105	pikonematis Mason, <i>Ichneutes</i> . . . . .	721
kuatunensis Munroe and Mutuura, <i>Pseudebulea</i> . . . . .	854	pilosus Kelton, <i>Slaterocoris</i> . . . . .	1127
kuatunensis <i>ichangensis</i> Munroe and Mutuura, <i>Pseudebulea</i> . . . . .	855	plauammi Menke, <i>Pison</i> ( <i>Krombeiniellum</i> ) . . . . .	1105
lancealis <i>bergmani</i> Munroe and Mutuura, <i>Perinephela</i> . . . . .	982	polypori Mason, <i>Colastes</i> . . . . .	715
lancealis <i>bonsuensis</i> Munroe and Mutuura, <i>Perinephela</i> . . . . .	19	posti Sauer, <i>Xysticus</i> . . . . .	1149
lancealis <i>pryeri</i> Munroe and Mutuura, <i>Perinephela</i> . . . . .	248	praestans Munroe and Mutuura, <i>Toxobotys</i> . . . . .	868
lancealis <i>sinensis</i> Munroe and Mutuura, <i>Perinephela</i> . . . . .	983	prathama Schmid, <i>Gunungiella</i> . . . . .	914
lancealis <i>taiwanensis</i> Munroe and Mutuura, <i>Perinephela</i> . . . . .	853	principis Munroe and Mutuura, <i>Aristebulea</i> . . . . .	857
laplaneti Mason, <i>Mastrus</i> . . . . .	1118	pseudocephalis Munroe, <i>Apilocrociis</i> . . . . .	443
lecontei Campbell, <i>Micropeplus</i> . . . . .	19	pseudotsugae Hedlin and Johnson, <i>Camptomyia</i> . . . . .	532
leechi Mason, <i>Cryptus</i> . . . . .	248	robustus Campbell, <i>Micropeplus</i> . . . . .	245
loani Mason, <i>Microctonus</i> . . . . .	17	rotundata Campbell, <i>Isomira</i> . . . . .	456
longiseta Richards, <i>Glyphina</i> . . . . .	726	saptadaci Schmid, <i>Gunungiella</i> . . . . .	932
lucens Reinhard, <i>Macromya</i> . . . . .	330	saptami Schmid, <i>Gunungiella</i> . . . . .	922
lungtanensis Munroe and Mutuura, <i>Pseudebulea</i> . . . . .	1285	saptatrimchi Schmid, <i>Gunungiella</i> . . . . .	950
luscinus Howden, <i>Ochodaetus</i> . . . . .	853	saptavimchi Schmid, <i>Gunungiella</i> . . . . .	940
manitobensis Richards, <i>Calaphis</i> . . . . .	1118	sidemialis Munroe and Mutuura, <i>Paranomis</i> . . . . .	997
mexicanus Campbell, <i>Isomira</i> . . . . .	1229	simplex Kelton, <i>Slaterocoris</i> . . . . .	1135
mindanaoensis Munroe and Mutuura, <i>Gynenomis</i> . . . . .	457	solidaginis Kelton, <i>Slaterocoris</i> . . . . .	1131
mixta Howden, <i>Hypothycce</i> . . . . .	991	sparsus Kelton, <i>Slaterocoris</i> . . . . .	1125
moupinensis Munroe and Mutuura, <i>Paranomis</i> . . . . .	543	stangei Menke, <i>Pison</i> ( <i>Krombeiniellum</i> ) . . . . .	1102
navadaci Schmid, <i>Gunungiella</i> . . . . .	1175	steinbachi Munroe, <i>Apilocrociis</i> . . . . .	446
navami Schmid, <i>Gunungiella</i> . . . . .	242	sternacuminatus Brown, <i>Ceratophyllus</i> . . . . .	492
navavimchi Schmid, <i>Gunungiella</i> . . . . .	934	subaenea <i>guatemalensis</i> Campbell, <i>Isomira</i> . . . . .	464
nebulosa McAlpine and Munroe, <i>Lonchaea</i> . . . . .	924	subaenea <i>punctata</i> Campbell, <i>Isomira</i> . . . . .	464
neotomae Campbell, <i>Micropeplus</i> . . . . .	942	subaenea <i>soror</i> Campbell, <i>Isomira</i> . . . . .	463
neotropicum Menke, <i>Pison</i> ( <i>Krombeiniellum</i> ) . . . . .	1106	szentivanyi Munroe, <i>Haritala</i> . . . . .	394
nodicosta Munroe and Mutuura, <i>Paranomis</i> . . . . .	995	tarantella McAlpine and Munroe, <i>Lonchaea</i> . . . . .	1169

	PAGE		PAGE
<i>tritrimchi</i> Schmid, <i>Gumungiella</i> .....	946	<i>urdbvakarni</i> Schmid, <i>Moropsyche</i> .....	1252
<i>trivimchi</i> Schmid, <i>Gumungiella</i> .....	936	<i>vanegudba</i> Schmid, <i>Moropsyche</i> .....	1256
<i>tsugae</i> Mason, <i>Hormius</i> .....	724	<i>vimchi</i> Schmid, <i>Gumungiella</i> .....	934
<i>tuberculatus</i> Richards, <i>Tuberculatus</i> ( <i>Tuberculatus</i> ) .....	591	<i>youboialis</i> Munroe and Mutuura, <i>Xanthopsamna</i> .....	981
<i>turkestanica</i> Munroe and Mutuura, <i>Psammotis</i> .....	974	<i>yucatanalis</i> Munroe, <i>Apilocrocis</i> .....	443

**MEMOIRS of the Entomological Society of Canada published in 1968**

**Memoir No. 52** (mailed 9 January): A history of grasshopper abundance surveys and forecasts of outbreaks in Saskatchewan — Paul W. Riegert

**Memoir No. 53** (mailed 12 February): Generic classification, evolution, and biogeography of the Sminthuridae of the world (Collembola) — W. R. Richards

**Memoir No. 54** (mailed 19 April): A review of the Trichiinae of North and Central America (Coleoptera: Scarabaeidae) — Henry F. Howden

**Memoir No. 55** (mailed 3 July): The *Imbecillus* and *Rufus* groups of the spider genus *Philodromus* in North America (Araneida: Thomisidae) — C. D. Dondale and J. H. Redner

**Memoir No. 56** (mailed 13 September): The tachinids of Trinidad. VIII. Phorocerines — W. R. Thompson

**Memoir No. 57** (mailed 5 December): A synopsis of the world fauna of *Myzocallis* Passerini (Homoptera: Aphididae) — W. R. Richards

**Memoir No. 58** (mailed 6 November): The North American Aegeriidae (Lipodoptera): A revision based on late-instar larvae — Margaret R. MacKay

THE RUNGE PRESS LIMITED, OTTAWA  
November issue mailed 26 November 1968

**D 3 4 1 3**

